

## WHAT IS CLAIMED IS:

1. A method of implementing an admission control algorithm in a telecommunications system, in which method at least one parameter of said algorithm is adapted  
5 dynamically as a function of a traffic model representative of the traffic present.
2. A method according to claim 1, wherein said traffic model includes one or more parameters representative of  
10 the type(s) of traffic present.
3. A method according to claim 2, wherein parameters representative of a type of traffic include parameters representative of quality of service (QoS) requirements  
15 for that traffic type.
4. A method according to claim 3, wherein parameters representative of quality of service requirements include a maximum transmission time-delay and a probability that  
20 the transmission time-delay will be greater than that maximum transmission time-delay.
5. A method according to claim 2, wherein parameters representative of the type of traffic include parameters  
25 representative of transmission resource requirements for said traffic type and for a given quality of service (QoS).
6. A method according to claim 5, wherein parameters  
30 representative of transmission resource requirements for a given quality of service (QoS) include a connection activity factor.
7. A method according to any one of claims 1 to 6,  
35 wherein, if different traffic types are present, said traffic model includes relative proportions for said different traffic types.

8. A method according to any one of claims 1 to 7, wherein said at least one parameter corresponds to a margin corresponding to a maximum acceptable load.

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9. A method according to any one of claims 1 to 7, wherein said at least one parameter corresponds to an equivalent bandwidth.

10 10. A method according to any one of claims 1 to 9, wherein the value of said at least one parameter is chosen from different reference values optimized for different reference traffic models.

15 11. A method according to claim 10, wherein, for a traffic model that does not correspond to a reference traffic model, a reference traffic model is determined that constitutes the best approximation thereof.

20 12. A method according to claim 10, wherein, for a traffic model that does not correspond to a reference traffic model, a reference traffic model is determined that constitutes the best approximation thereof and has the severest constraints.

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13. A method according to any one of claims 1 to 12, including a first step during which reference traffic models are determined and corresponding reference values for said at least one parameter are determined.

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14. A method according to claim 13, wherein said reference values are determined by simulation or measurement.

35 15. A method according to claim 13, wherein said reference values are determined by calculation.

16. A method according to any one of claims 13 to 15, including a second step during which reference traffic models and corresponding reference values are stored in a memory.

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17. A method according to any one of claims 13 to 16, including a third step during which a traffic model representative of the traffic present is estimated.

10 18. A method according to claim 17, wherein said estimation includes an estimation of the traffic types present and, if different traffic types are present, relative proportions for said different traffic types.

15 19. A method according to claim 18, wherein said estimation includes estimating the traffic types present based on traffic information contained in signaling messages received by a network element from at least one other network element.

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20. A method according to claim 18, wherein said estimation includes estimating relative proportions for different traffic types obtained by measuring or counting traffic.

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21. A method according to any one of claims 17 to 20, wherein a traffic model representative of the traffic present is re-estimated each time a new connection is set-up and each time a connection is cleared down.

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22. A method according to any one of claims 17 to 20, wherein a traffic model representative of the traffic present is re-estimated at the end of a pre-determined time period.

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23. A method according to any one of claims 13 to 22, including a fourth step during which the reference

traffic model is chosen that best approximates the traffic model estimated during the third step.

24. A method according to any one of claims 13 to 23,  
5 including a fourth step during which the reference traffic model is chosen that best approximates the traffic model estimated during the third step and has the severest constraints.
- 10 25. A method according to any one of claims 13 to 24, including a fifth step during which said at least one parameter of said algorithm is dynamically modified as a function of parameter(s) corresponding to the reference traffic model chosen during the fourth step.
- 15 26. A method according to claim 25, wherein a modification is effected only in the event of a significant change in said at least one parameter.
- 20 27. A method according to any one of claims 13 to 26, including a sixth step during which said algorithm is executed with said at least one parameter modified during the fifth step.
- 25 28. A method according to one any one of claims 1 to 27, used for AAL2 connection admission control on an ATM virtual circuit.
29. A method according to claim 28, used for AAL2  
30 connection admission control on an ATM virtual circuit at a Iub interface in a UTRAN.
30. A method according to claim 28, used for AAL2  
connection admission control on an ATM virtual circuit at  
35 a Iu-CS interface in a UTRAN.
31. A method according to claim 28, used for AAL2

connection admission control on an ATM virtual circuit at a Iur interface in a UTRAN.

32. A method according to any one of claims 1 to 27, used  
5 for admission control in a packet-switched mode network.

33. A method according to any one of claims 1 to 27, used  
for admission control at the radio interface of a CDMA  
system.

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34. A radio access network element for use in a mobile  
radio system and including means for implementing a  
method according to any one of claims 1 to 33.

15 35. A base station controller (RNC) for use in a mobile  
radio system and including means for implementing a  
method according to any one of claims 1 to 33.

20 36. A base station (Node B) for use in a mobile radio  
system and including means for implementing a method  
according to any one of claims 1 to 33.

25 37. A core network element for use in a mobile radio  
system and including means for implementing a method  
according to any one of claims 1 to 33.